

REMARKS

This paper is responsive to an Office Action dated January 14, 2005. Prior to this amendment claims 1-6, 8-20, and 22-26 were pending. Claims 1-6, 8-20, and 22-26 remain pending.

In Section 2 of the Office Action, claims 1 and 16 have been rejected under 35 U.S.C. 102(b) as anticipated by the Applicant's admitted prior art (AAPA). With respect to claims 1 and 16, the Office Action states that the AAPA describes a step of "at a querying device, building a GUI representing the availability of known network-connected devices; and, querying the known network-connected devices to determine their availability." This rejection is traversed as follows.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Beginning at page 1, ln. 25, the Applicant's specification states that conventional systems "build the GUI to validate device availability only *after* (emphasis added) it has received replies from all the components (network devices) whose existence the application wants to query." This conventional process is described in more detail in the explanation of Fig. 1, where it states that Step 12 sends queries to network-connected devices, and Step 16 waits for all the queries (threads) to return with an answer. Only after these 2 steps, is the GUI built in Step 18 (page 2, ln. 21. through page 3, ln. 4).

Unlike the AAPA, the claimed invention GUI is built *before* queries are sent out to the network-connected devices. In summary, the AAPA builds a GUI after the queries are returned, and the invention of claims 1 and 15 builds the GUI before the queries are sent.

In the *Response to Arguments* Section of the Office Action (page 9, last paragraph) it states that, "the claim language does not explicitly state that the GUI is built without querying the network..." In response, the Applicant submits that claims 1 and 16 are not attempting to recite a method of "building a GUI without querying the network". Rather, the claims must be read for what is actually recited, "following the building of the GUI, querying the known network-connected devices to determine their availability." The *Response to Arguments* Section further states that, "...nor does it (*the claim language*) state how the GUI checks for availability without querying the network devices..." Again, the Applicant is not attempting to recite such a function. The claim recites that an availability GUI is built, then the devices are checked for their availability. The claim does not recite that the GUI is initially listed as available, only that an availability GUI is built. The claim does not state the status (available or unavailable) of the device in the initially built GUI, as the status is irrelevant. As noted in one of the dependent claims (claim 3), following the building of the GUI, the status of each device is listed as unavailable. However, the invention would work identically if the devices were initially represented as "available", "unknown", or even blank (no data).

The *Response to Arguments* Section continues, "the claim language does not show ... how a GUI that represents "the availability of known network-connected devices" is built without a way to determine

what devices are available to display without some type of query.”

However, this is exactly the novelty of the invention. Devices are initially represented in the availability GUI, before the query process is begun, without determining the device's true availability status. The claim does not state that the GUI initially represents the true status of connected devices.

It is the Applicant's opinion that the Examiner is misreading the claim phrase “building a GUI representing the availability...” This phrase should not be read to mean that a GUI is built based upon a query, or even based upon accurate representations of actual availability status. Alternately stated, the phrase “representing the availability... of devices” should not be taken to be read as “representing available ... devices”. “Availability” does not mean the same as “available”, as there are at least three states of availability: available, not available, and unknown. Rather, the claim must be read as written, that a GUI is built representing device availability, and following the GUI build, querying the devices to determine their (actual) availability.

The *Response to Arguments* Section also states that Step 1302 shows a device query being conducted, and the query occurs prior to building the GUI in Step 1304. In response, the Applicant respectfully notes Step 1302 describes “issuing a query command”. This step does not state that an actual device query is conducted. Step 1302 describes a system that is being initialized and seeking to determine the status of connected devices. The first step in response to issuing a query command is to build a GUI (Step 1304). Then, in Step 1306, an actual query is conducted. This process is discussed in more detail in the specification at page 15, lines 9-22, and page 7, lines 7-18.

Since the AAPA does not describe all the limitations of claims 1 and 15, it cannot anticipate. Claim 16, dependent from claim 15, enjoys the same distinctions from the prior art, and the Applicant respectfully requests that the rejection be removed.

In Section 6 of the Office Action claims 2-7, 9-15, and 17-26 have been rejected under 35 U.S.C. 103(a) as unpatentable with respect to the AAPA, in view of Knodt et al. ("Knodt"; US 5,987,535). With respect to claim 2, the Office Action states that the AAPA fails to teach a method of providing immediate status, but that Knodt provides immediate status indicators, and that it would have been obvious to combine the teachings of the AAPA and Knodt "because Knodt et al's use of immediate status of a user interface in AAPA's method would provide a user the ability to view the status of devices immediately by mimicking machine activities as they occur." With respect to claims 13 and 15, the Office Action states that the AAPA describes all the claim elements. This rejection is traversed as follows.

An invention is unpatentable if the differences between it and the prior art would have been obvious at the time of the invention. As stated in MPEP § 2143, there are three requirements to establish a *prima facie* case of obviousness.

First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and reasonable expectation of success must both be found in

the prior art and not based on applicant's disclosure. *In re Vaeck* 947 F.2d 488, 20 USPQ2d, 1438 (Fed. Cir. 1991).

Knodt states that the object of his invention is to mimic machine activity as it occurs and to provide timing information (col. 2, ln. 10-13). In Fig. 1, Knodt describes a system that includes connected devices such as a display terminal, fax, file server, work station, database system, mail system, and others (col. 3, ln. 7-18). Knodt states that the system could be used as a tutorial, because it shows what is currently happening, what is going to happen, and job access points (col. 3, ln. 62 through col. 4, ln. 3). However, Knodt never discusses how network devices are depicted on the screen before the system determines if the devices are actually accessible. Neither does Knodt describe a screen updating process in the context of network discovery. More explicitly, Knodt does not describe a system that builds a device availability GUI, prior to actually querying the devices.

As noted in the Background Section of the Applicant's specification (page 2, ln. 8-20), it takes as long as 30 seconds for a time-out to occur, if a device does not respond to a query. Thus, during the initialization process, the ability to mimic machine activities as they occur will not result in an immediate status update. Due to the timeout problem, the ability to mimic machine activity can result in status updates that are delayed as long as 30 seconds. Therefore, it might be said that the AAPA and Knodt methodologies, that mimic machine activities as they occur, teach away from the claimed invention, which is further proof that the claimed invention cannot be considered obvious in light of the prior art.

With respect to the *first prima facie* requirement needed to support a case of obviousness, even if the two references are analogous art, their commonality has nothing to do with making the claimed invention obvious. Alternately stated, there is no suggestion to modify the AAPA using Knodt, since Knodt never describes a way of solving the problem exposed in the AAPA – the building a GUI upon initialization. Since the AAPA exposes the problem of building a GUI upon initialization, and Knodt offers no guidance in this specific area, there can be no motivation to combine reference in a manner that might make the claimed invention obvious.

The *Response the Arguments*, Section C, of the Office Action states that the AAPA describes a GUI to determine device availability and the Knodt describes a user interface to provide immediate status of imaging devices. The Office Action states that the AAPA teaches the need to validate each component's existence, and the Knodt teaches that it would be desirable to present to a user immediate indications of whether a device is available, or not. The Office Action continues that "one skilled in the art would be motivated to combine the teachings of the AAPA and Knodt because it would create a user interface that can receive an immediate indication to the user of the status of the devices on the network."

However, the claimed invention does not describe, and is not attempting to describe a user interface that provides an immediate indication of device status. As stated above, claims 1, 13, and 15 describe a device-availability GUI that is built prior to making device queries. Therefore, even if the Examiner's assertions in the above paragraph are accurate, the motivation to combine references is lacking. The motivation

to combine should not be based upon the fact the two references are in similar fields of art, or that the two references may be combined retrospectively to make a useful invention. Rather, the motivation must be based upon one reference suggesting a modification to a second reference that would make the claimed invention obvious. Here, even if Knodt teaches a user interface that provides immediate device status, Knodt does not teach that a device-availability GUI can be built before device inquiries are made.

The second *prima facie* requirement addresses the same issue from another point of view. Even if an expert were given the two references as a starting point, there is no reasonable expectation that this expert would come up with the claimed invention. The combination of references does not provide an expectation of success that a device-availability GUI can be built that is *not* dependent upon knowing the accessibility status of networked devices.

With respect to the third requirement to support a *prima facie* case of obviousness, the combination of references does not teach all the limitations of claims 1, 13, and 15. Claims 1, 13, and 15 recite the limitations of a network discovery method that builds a device-availability GUI before sending device availability queries. The AAPA only describes building a GUI after all the device query responses are received. Knodt merely describes a screen that is updated in response to the device query/responses. Further, Knodt does not discuss a network discovery process or initialization process. Thus, the combination of the AAPA and Knodt does not teach the limitation of claims 1, 13, and 15.

The affidavit of Mr. Sridhar Dathathraya was enclosed in the Applicant's previous response to support the position that the combination

of references does not make the claimed invention obvious. The *Response to Arguments* Section of the Final Office Action states that the affidavit is insufficient to overcome the rejections made under 35 U.S.C. 102(b) and 103(a) because "the affidavit is only Mr. Dathathraya's opinion and not based upon factual evidence."

As stated in MPEP 716.01(c) III, the opinions of experts in the field have no weight with regard to legal conclusions. However, their opinions are entitled weight with respect for the underlying facts. Further, the Court acknowledges that, "some weight ought to be given to a persuasively supported statement of one skilled in the art on what was not obvious to him." *In re Lindell*, 385 F.2d 456, 155 USPQ 524 (CCPA 1967). In this case Mr. Dathathraya was asked to examine the two prior art references and the claimed invention. Mr. Dathathraya's opinion as an expert in the field was that Knodt did not describe any type of network discovery mechanism. Mr. Dathathraya's conclusion was that, since the AAPA only describes a discovery method that builds a device-availability GUI after sending queries and receiving device availability responses, the combination of references could not suggest a discovery method that built a device-availability GUI prior to sending device availability queries. The Applicant's respectfully requests that Mr. Dathathraya's technical analysis be given some weight. If given weight, Mr. Dathathraya's opinions clearly support the underpinnings of the Applicant's argument that a *prima facie* case of obviousness has not been made.

In summary, the combination of the AAPA and Knodt do not explicitly describe all the elements of claims 1, 13, and 15. Neither do the references suggest any modifications that make these claims obvious. Claims 2-6 and 8-12, dependent from claim 1, claim 14, dependent from



claim 13, and claims 16-20 and 22-26, dependent from claim 15, enjoy the same distinctions; and the Applicant respectfully requests that the rejection be removed.

In Section 23 of the Office Action, claim 8 has been rejected under U.S.C. 103(a) as unpatentable over the AAPA and Knodt, and further in view of Bahlmann (US 6,393,478). The Office Action states that the AAPA and Knodt fail to teach a Sockets connect function, ping function, or NSLookup function. The Office Action states that Bahlmann shows the NSLookup function and that it would have been obvious to combine references "because Knodt's et al's use of building a GUI in real time and Bahlmann's use of NSLookup function is AAPA's system would allow a user to view instant status information regarding monitored devices by using NSLookup to find the IP address corresponding to the monitored devices and devices to locate the monitoring device." This rejection is traversed as follows.

Bahlmann describes a method for troubleshooting network connected devices identifiable by a medium access control address (MAC). A browser is used to find a particular device based upon its MAC, and display device specific data. Update functions are provided to change the data in the internal database, and utility functions are provided to aid in troubleshooting, maintenance, and verification (col. 2, ln. 26-40). However, Bahlmann only provides the conventional method of updating a browser web page in response to device query/responses, and he does not specifically address network discovery processes. Because only conventional query/response mechanisms are described, Bahlmann can be said to teach away from the claimed invention's method of building a GUI before device queries are made, and before device responses are received.

As with the AAPA and Knodt, Bahlmann is susceptible to the time-out problem that occurs during initialization when a device does not respond, which can delay a screen update for as long as 30 seconds.

Therefore, the combination of the AAPA and Knodt, with Bahlmann still fails to provide any guidance as to how the GUI building method of the AAPA can be modified. With respect to the base claim (claim 1), from which claim 8 depends, the first *prima facie* requirement to support a case of obviousness has not been met.

With respect to the second *prima facie* requirement, even if the references were combined, there is no expectation of success in the claimed invention from combining the references. Neither Bahlmann nor Knodt provides an expectation that the AAPA GUI building method problem can be modified into one that is not dependent upon the network devices responding to a query.

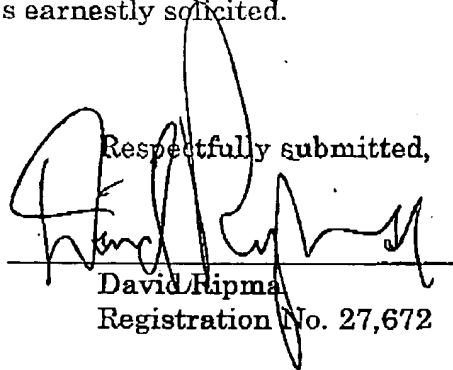
With respect to the third requirement to support a *prima facie* case of obviousness, the combination of references does not teach all the limitations of claim 1. Claim 1 recites the limitation of building the GUI before sending and receiving device availability queries. The AAPA only describes building a GUI after all the device query responses are received. Both Knodt and Bahlmann describe screen/browser updates that only occur in response to (after) a device query/response. Thus, the combination of the AAPA, Knodt, and Bahlmann does not teach the limitations of claim 1. Claim 8, dependent from claim 1, enjoys the same distinctions. Since the prior art references neither explicitly disclose nor suggest the claimed invention, the Applicant requests that the rejections be removed.

It is believed that the application is in condition for allowance and reconsideration is earnestly solicited.

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Respectfully submitted,



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